

INTERNATIONAL SEARCH REPORT

Int.

Application No
PCT/EP2004/013051

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F16L59/14 F16L1/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 02/44607 A (LAURAND GUY ;MAYAU DAVID (FR); TRELLEBORG IND (FR)) 6 June 2002 (2002-06-06) cited in the application page 1, line 5 - line 24 page 4, line 7 - page 7, line 30 page 13, line 9 - page 14, line 2 figures 1,2,4A,5 -----	1-4
Y	US 6 397 895 B1 (LIVELY F GLENN) 4 June 2002 (2002-06-04) column 4, line 26 - column 12; figure 1 ----- -/-	1,2,4

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the International search

Date of mailing of the International search report

27 January 2005

04/02/2005

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INT'L TIONAL SEARCH REPORT

In. Application No.
PCT/EP2004/013051

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 02/16726 A (CRP GROUP LTD ;GIBSON ROBERT (GB); HEPWORTH RICHARD (GB); TYRER AN) 28 February 2002 (2002-02-28) page 1, line 3 - page 3, line 15 page 6, line 22 - page 8, line 20 figures 1-6 -----	3
A	US 4 590 971 A (WADIE BRIAN J ET AL) 27 May 1986 (1986-05-27) column 2, line 48 - column 3, line 37; figures 1,2 -----	2

INT'L TIONAL SEARCH REPORT

Information on patent family members

In.

International Application No

PCT/EP2004/013051

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0244607	A	06-06-2002		FR 2817606 A1 AU 2078202 A BR 0115803 A DE 60105634 D1 EP 1337780 A1 WO 0244607 A1 HU 0400542 A2 JP 2004514861 T MX PA03004684 A NO 20032481 A US 2004035484 A1		07-06-2002 11-06-2002 13-01-2004 21-10-2004 27-08-2003 06-06-2002 28-05-2004 20-05-2004 22-09-2003 10-06-2003 26-02-2004
US 6397895	B1	04-06-2002		EP 1198526 A1 US 2002066491 A1 US 2002125324 A1 CA 2377767 A1 WO 0102503 A1		24-04-2002 06-06-2002 12-09-2002 11-01-2001 11-01-2001
WO 0216726	A	28-02-2002		AU 8230901 A BR 0113370 A EP 1311739 A1 WO 0216726 A1 US 2004086339 A1		04-03-2002 08-07-2003 21-05-2003 28-02-2002 06-05-2004
US 4590971	A	27-05-1986		AT 26336 T AU 2258783 A CA 1233764 A1 DE 3370680 D1 DK 593483 A EP 0112706 A1 JP 59166796 A NO 834757 A ,B		15-04-1987 28-06-1984 08-03-1988 07-05-1987 24-06-1984 04-07-1984 20-09-1984 25-06-1984